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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/739,436	12/17/2003	Anna Barlow	A03P1081	9263

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PACESETTER, INC.
15900 VALLEY VIEW COURT
SYLMAR, CA 91392-9221

EXAMINER

GEDEON, BRIAN T

ART UNIT	PAPER NUMBER
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3766

DATE MAILED: 12/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/739,436	Applicant(s) BARLOW ET AL.	
	Examiner Brian T. Gedeon	Art Unit 3766	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>12/17/2003</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-16 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Acken (US Patent no. 5,324,311) in view of Lim (US Patent no. 5,769,671).

In regard to claims 1, 10, and 16, Acken describes an electrical connector for an implantable medical device with a garter ring contact 28; the garter ring is placed within an annular groove 26 formed within the cylindrical receptacle, see Figure 1. The garter spring 28 projects into the interior of the receptacle from the annular groove 26. Lim, in the same field of endeavor as Acken, describes a contact spring 2 located within the cylindrical receptacle of an electrical connector. The contact spring 2 is secured between two cylindrical surfaces 12 and 14 of the receptacle, col 3 lines 65-68 and col 4 lines 1-4. Several projections 25a-25d of the spring project inwardly, beyond the respective cylindrical surface 12 towards the central axis of the receptacle, col 2 lines 23-26 and 35-40. The contact spring 2 serves to engage and secure a lead connector within the receptacle in order to ensure good electrical and mechanical contact; the projections 25a-25d of the spring 2 allow for contact to be made between the spring and a lead connectors, while surface 12 locks the spring 2 in place so as to prevent possible pull-out of the spring with the extraction of the lead, col 4 lines 34-44. Therefore, it

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would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Acken reference some sort of retaining element around the spring in order to prevent dislodgement of the spring when a lead connector is being extracted.

Further in regard to claim 16, Acken in view of Lim substantially describe the invention as claimed. Lim further teaches that it is well known in the art that a pacing system comprises the following elements: pulse generator (contained within an implantable housing), a lead system, and an electrical interface (i.e., a header containing terminal connectors, as well as electrodes to deliver electrical pulses to tissue), col 1 lines 14-43.

In regard to claims 2-6 and 11-15, Acken teaches the use of a garter spring for securing a medical lead within an implantable pacer housing connector. However, Acken does not describe or depict the projection of a spring inwardly towards the center of the connector. Lim describes a spring 2 with several projections, 25a-25d, of the spring 2 projecting towards the center of a cylindrical connector; the projections 25s-25d project through surface 12 which retains the spring 2 in place. Figures 2, 3, and 5 of Lim show the projections being circumferentially spaced about a tubular/cylindrical wall 12, equal in length and size, equiangularly spaced, and have at least three slots where the projections 25a-25d protrude. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Acken reference some sort of retaining element around the spring in order to prevent dislodgement of the spring when a lead connector is being extracted.

In regard to claim 18, both Acken, figures 1 and 2, and Lim show cylindrical receptacles with a garter spring in the central opening serving as electrical connectors for medical electrical leads to a pulse generator. It would be obvious to one of ordinary skill in the art at the time the invention made to fabricate a medical lead with a terminal connector compatible with the connector provided on a pulse generator housing.

2. Claims 17 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Acken (US Patent no. 5,324,311) in view of Lim (US Patent no. 5,769,671), further in view of Kast et al. (US Patent no 6,895,276).

In regard to claims 17 and 19, Acken and Lim substantially describe the invention as claimed except for the receptacle containing a slot for receiving an electrical contact assembly, for detachably latching the connector assembly within the receptacle. Kast et al. in the same field of endeavor shows a connector receptacle, figure 12, with garter springs 148. The receptacle contains a plurality of annular channels for receiving at least one electrical contact assembly, 160₁-160₄. Annular flanges 36, 38, 76, 78, figures 2 and 3, are located on the compatible connector that is inserted into the receptacle. The annular flanges, 36, 38, 76, 78, engage the annular channels, 160₁-160₄. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to make receptacle connector assembly with channels or grooves to engage the annular flanges electrical contact assembly insert can be mechanically secured within the receptacle.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Stutz, Jr. (US Patent no. 5,076,270) depicts a method for making electrical connections in an implantable pacemaker.
- Truex et al. (US Patent no. 4,934,366) describes a feedthrough connector for implantable medical device using a garter spring.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian T. Gedeon whose telephone number is (571) 272 3447. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert E. Pezzuto can be reached on (571) 272 6996. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Brian T. Gedeon
Patent Examiner
Art Unit 3766



Robert E. Pezzuto
Supervisory Patent Examiner
Art Unit 3766

BTG